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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/817,046	04/02/2004	Dethe Elza	413478007US	2215
25096	7590	05/30/2007		
PERKINS COIE LLP PATENT-SEA P.O. BOX 1247 SEATTLE, WA 98111-1247			EXAMINER BASHORE, WILLIAM L	
			ART UNIT 2176	PAPER NUMBER
			MAIL DATE 05/30/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/817,046	Applicant(s) ELZA ET AL.	
	Examiner William L. Bashore	Art Unit 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. <u>attached</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/19/07</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

1. This action is responsive to the following communications: RCE filed March 19, 2007.
2. Please note that the new examiner of record for this case is William L. Bashore. Please update future correspondence accordingly.
3. Claims 1-30 are pending, with claims 1 and 16 being the independent claims.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 19, 2007 has been entered.

Information Disclosure Statement

4. A signed and dated copy of applicant's IDS, which filed on March 19, 2007, is attached to this Office Action.

Claims Rejection – 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iverson, Lee, "NODAL: A Filesystem for Ubiquitous Collaboration," White Paper, SRI International, September 20,**

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2001, last downloaded by the Examiner on January 13, 2006 from <http://nodal.sourceforge.net/NODAL-WhitePaper.html>, downloaded pages 1-32 [hereinafter “NODAL”], in view of Iverson, Lee, “[un re-II] Meeting Summary: 4 May 2000,” Message id: 3912508E.2CF1B4C@eng.sun.com from Erick Armstrong, May 4, 2000, last downloaded by the Examiner on January 14, 2006, from: <http://hot.burningchrome.com/archives/unrev-ii/msg01068.html>, downloaded pages 1-3 [hereinafter “Iverson”].

Regarding **dependent claim 1**, NODAL in view of Iverson teaches:

A method in a distributed document object model system for associating business logic, comprising:

(It is noted that a “business logic” is defined in the application as including an asynchronous mode wherein a client-side business logic component may not need to wait for the DDOM client to receive a response to a mutation request before the mutation routine returns. Specifically, see Iverson, page 27, third paragraph, stating: “Another advantage is that the server may send *any* update to the client at any time, thus fulfilling the need to notify the client when other users have modified content.” (Emphasis in the original). The Iverson example, of notification to clients of a change in a database, is nearly identical to the embodiment described in the disclosure, as follows: “As an example, the business logic component may monitor a financial database and cause mutations to occur to a document based on changes in the database.”

The distributed document object model DDOM, is taught in Iverson, first through third paragraphs.)

receiving a registration request from a business logic event handler for an event of the distributed document object model;

(See, NODAL, pages 26-27, teaching the asynchronous update routine. See also, NODAL, pages 20-21, teaching the “Cursor” interface that handles the data mutation interfaces as the business event logic handler.)

registering the business logic event handler; and

(See, NODAL, pages 20-21, teaching that the “Cursor” is part of the software and is inherently registered to be

in communication between the client and the server.)

when an event occurs, notifying the business logic event handler;

(See, NODAL, page 20, teaching the permissions for mutations are notified to the “Cursor” object.)

receiving an indication from the business logic event handler; and

(See, NODAL, pages 18-20, teaching messages from the “Cursor” object regarding requested mutations.)

performing a function relating to the received indication.

(See, NODAL, pages 18-20, teaching the editing functions.)

(NODAL teaches the business logic handler and its registration and function as claimed, but it does not expressly teach the distributed document object model (DDOM).

Iverson expressly teaches the DDOM.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Iverson and NODAL. Both NODAL and Iverson are in the same field of endeavor, multi-user hierarchical document editing and manipulation.

The suggestion or motivation to combine the references is that they are created by the same person, Iverson reporting the developmental creation of Lee Iverson, and NODAL being authored by Lee Iverson. In addition, see, NODAL, page 11, teaching that NODAL was designed to work with a wide variety of distributed networks.)

Regarding **dependent claim 2**, NODAL in view of Iverson teaches:

The method of claim 1 wherein the event handler handles an event that is generated before a requested mutation is applied to a document.

(See the rejection of claim 1, above, made applicable hereto. See also, NODAL, pages 18-21 teaching engaging the “Cursor” object before a mutation.)

Regarding **dependent claim 3**, NODAL in view of Iverson teaches:

The method of claim 2 wherein the event handler is registered for a document type.

(See, NODAL, page 29, teaching the system, and inherently the “Cursor” object, enabled for an “image” type document.)

Regarding **dependent claim 4**, NODAL in view of Iverson teaches:

The method of claim 2 wherein the handler disallows the requested mutation.

(See, NODAL, pages 18-19, teaching disallowing editing requests.)

Regarding **dependent claim 5** NODAL in view of Iverson teaches:

The method of claim 2 wherein the handler allows the requested mutation.

(See, NODAL, pages 18-19, teaching allowing editing requests.)

Regarding **dependent claim 6**, NODAL in view of Iverson teaches:

The method of claim 2 wherein event handling is performed on a client computing device.

(See, NODAL, pages 9-10, teaching that the NODAL system may be either client-side or server-side.)

Regarding **dependent claim 7**, NODAL in view of Iverson teaches:

The method of claim 2 wherein event handling is performed on a server computing device.

(See, NODAL, pages 9-10, teaching that the NODAL system may be either client-side or server-side.)

Regarding **dependent claim 8**, NODAL in view of Iverson teaches:

The method of claim 1 wherein the event handler handles an event that is generated when a requested mutation is applied to a document.

(See, NODAL, page 20, teaching that the “Cursor” object processes the entire content of the reference, including

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the mutation.)

Regarding **dependent claim 9**, NODAL in view of Iverson teaches:

The method of claim 1 wherein the event handler handles an event that is generated after a requested mutation is applied to a document.

(See, NODAL, page 20, teaching that the “Cursor” object maintains an audit trail after mutations are made.)

Regarding **dependent claim 10**, NODAL in view of Iverson teaches:

The method of claim 1 wherein the event handler enforces a business rule.

(See, NODAL, page 20, teaching that the “Cursor” object enforces business rules related to permissions to make mutations.)

Regarding **dependent claim 11**, NODAL in view of Iverson teaches:

The method of claim 10 wherein a business rule requests a mutation to a hierarchical document.

(See, NODAL, page 20, teaching that the “Cursor” object enforces business rules related to permissions to make mutations.)

Regarding **dependent claim 12**, NODAL in view of Iverson teaches:

The method of claim 11 wherein an answer message is sent to a client that requested a mutation that caused the event handler to enforce the business rule that requested the mutation.

(See, NODAL, page 20, teaching that a program accessing the NODAL repository for any purpose other than browsing will deal primarily with the “Cursor” interfaces. See also, NODAL, page 27, teaching messaging from the server, “Cursor” object, regarding mutations.)

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Regarding **dependent claim 13**, NODAL in view of Iverson teaches:

The method of claim 12 wherein a broadcast message is sent to another connected client.

(See also, NODAL, page 27, teaching messaging from the server, “Cursor” object, can send any update messages to the client at anytime, which inherently includes a message to any client at any time.)

Regarding **dependent claim 14**, NODAL in view of Iverson teaches:

The method of claim 11 wherein the business rule requests the mutation without a corresponding request from a client.

(See, NODAL, page 20, teaching that the “Cursor” object may determine the minimal path from a mutation to the document’s root node without user direction.)

Regarding **dependent claim 15**, NODAL in view of Iverson teaches:

The method of claim 14 wherein a broadcast message is sent to all connected clients.

(See also, NODAL, page 27, teaching messaging from the server, “Cursor” object, can send any update messages to the client at anytime, which inherently includes a message to any client at any time.)

Regarding **claims 16-30**, claims 16-30 incorporate substantially similar subject matter as claimed in claims 1-15, respectively, and are rejected along the same rationale.

6. It is noted that any citations to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant

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for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See, MPEP 2123.

Response to Arguments

7. Applicants' arguments filed March 19, 2007 have been fully and carefully considered, but they are not persuasive.

Regarding rejections of claims 1 and 16:

Applicants argue on page 14 –15 of the RCE that NODAL does not teach Applicant's claimed asynchronous invocation mode of a business logic event handler.

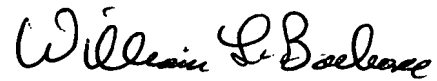
The Examiner respectfully disagrees. Specifically, see Iverson, page 27, third paragraph, stating: "Another advantage is that the server may send *any* update to the client at any time, thus fulfilling the need to notify the client when other users have modified content." (Emphasis in the original). The Iverson example, of notification to clients of a change in a database, is nearly identical to the embodiment described in the disclosure, as follows: "As an example, the business logic component may monitor a financial database and cause mutations to occur to a document based on changes in the database." NODAL, pages 26-27, teaches the asynchronous update routine. NODAL, pages 20-21, teaches the "Cursor" interface that handles the data mutation interfaces as the business event logic handler. NODAL, page 27, teaches a business logic event handler such that mutations to the file may be automatically messages to a client, or may be delayed for processing. NODAL, pages 20-21, teaches that the "Cursor" is part of the software and is inherently registered to be in communication between the client and the server. NODAL teaches the business logic handler and its registration and function as claimed, but it does not expressly teach the distributed document object model (DDOM). Iverson expressly teaches the DDOM. The distributed document object model DDOM, is taught in Iverson, first through third paragraphs.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William L. Bashore whose telephone number is (571) 272-4088. The examiner can normally be reached on 9:00 am - 5:30 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


WILLIAM BASHORE
PRIMARY EXAMINER

May 28, 2007